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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,271	10/24/2003	Hiroynki Oda	KIN91USA	9070
270	7590	03/17/2005	EXAMINER	
HOWSON AND HOWSON ONE SPRING HOUSE CORPORATION CENTER BOX 457 321 NORRISTOWN ROAD SPRING HOUSE, PA 19477			HUG, ERIC J	
			ART UNIT	PAPER NUMBER
			1731	
DATE MAILED: 03/17/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/693,271	ODA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Eric Hug	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,9,10,13,14,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 3-8,11,12,15,16,19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 9, 13, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Joyce (US 6,592,636). Joyce discloses a press felt comprising a fibrous (nonwoven) anti-rewet scrim or barrier layer incorporated within the structure of the press felt. The barrier layer is formed by fusion and compression of batt fibers on the paper web side layer of the felt. The barrier layer is also formed within the paper web side batt layer of fibers. Note that in one embodiment, the barrier layer is between two layers of batt fibers (column 5, claim 2), wherein one layer of batt is attached to the base fabric (on the press side of the barrier layer) and the other is on the paper side of the barrier layer (the web-contacting surface). A hydrophobic treatment is applied to the barrier layer (column 4, lines 31-33). Joyce discloses the use of the felt with one or more press nips, wherein one or two felts can be used within each press nip (column 1, lines 18-28).

2. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Eschmann (US 5,204,171). Eschmann discloses a press felt for a press section of a papermaking machine

Art Unit: 1731

having a filamentary blocking layer disposed within the fibrous batt layer that makes up the paper web side of the felt. The blocking layer is arranged to be at a certain distance above the support layer, but beneath the paper contacting surface. See column 2, lines 34-44. This reads on the nonwoven fabric and its arrangement as given in claim 1. Eschmann does not describe the blocking layers as being "hydrophilic", however, its purpose is to facilitate drainage of water in the press nip and prevent re-wetting of the web thereafter. Thus, the blocking layer is inherently hydrophilic by definition. The felt is used in a press section of a papermaking machine.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2, 10, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joyce (US 6,592,636) in view of Lundstrom (US 4,500,588). Joyce discloses a press felt comprising a fibrous (nonwoven) anti-rewet scrim or barrier layer incorporated within the structure of the press felt. The barrier layer is formed by fusion and compression of batt fibers on the paper web side layer of the felt. The barrier layer is also formed within the paper web side batt layer of fibers. Note that in one embodiment, the barrier layer is between two layers of batt fibers (column 5, claim 2), wherein one layer of batt is attached to the base fabric (on the press side of the barrier layer) and the other is on the paper side of the barrier layer (the web-

Art Unit: 1731

contacting surface). A hydrophobic treatment is applied to the barrier layer (column 4, lines 31-33). Joyce discloses the use of the felt with one or more press nips, wherein one or two felts can be used within each press nip (column 1, lines 18-28). Joyce does not disclose the fineness of the fibers making up fibers making up the paper web side of the felt.

Lundstrom discloses in Figure 3 a press felt for a paper machine having a base layer, fibrous batt, and a non-woven filtering intermediate layer 24 which is equivalently a barrier layer. Lundstrom discloses that the fibers making up the paper side of the felt have a fineness of 6.0 denier or less (see column 3, lines 50-56; column 4, Example 2). Therefore, at the time of the invention, it would have been obvious to one skilled in the art to provide fibers making up the web side layer of Joyce with equivalent fineness. A value of 1.0 denier = 1.1 dtex, therefore Lundstrom teaches a fineness that is less than the claimed value of 9 dtex for the paper web side.

#### ***Allowable Subject Matter***

Claims 3-8, 11, 12, 15, 16, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The claims are allowable for further providing the basis weight ratio of batt to hydrophilic nonwoven fabric and/or the water contact angle at 30-50% water content of the nonwoven fabric.

Art Unit: 1731

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

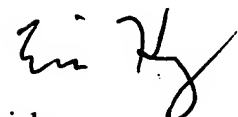
Diaz-Kotti (US 6,171,446) discloses the use of hydrophilic fibers in the batt material of press felts.

Hansen (US 2004/0069432) discloses a polymeric barrier layer disposed in a press felt and positioned between a base layer and fibrous batt surface layer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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